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ABSTRACT

Discussed in this paper are reasons why people who speak second languages may not speak or write them with native-speaker-like fluency. These second-language deficiencies may be the results of (1) interference, the use of aspects of another language at a variety of levels; (2) strategies of learning such as over overgeneralization and analogy by means of which the learner tests out his hypotheses about the structure of the language; (3) strategies of assimilation, in which the learner makes his learning task easier; and (4) strategies of communication, whereby the learner adapts what he knows into an efficient communication model, producing an optimal utility grammar from what he knows of the language. In addition to understanding these deficiencies, it is necessary to distinguish between performance and competence errors. The former are occasional and haphazard and are related to such factors as fatigue and memory limitations. The latter are systematic and may represent either a transitional stage in the development of a grammatical rule or the final stage of the speaker's knowledge. While knowledge about second language learning is still largely speculative, excluding the possibility of prescribing recipes for teachers, this account of errors and learning strategies may suggest some of the reasons for errors. (Author/AMM)

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ERROR ANALYSIS AND SECOND LANGUAGE STRATEGIES

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ERROR ANALYSIS AND SECOND LANGUAGE STRATEGIES

INTRODUCTION

The field of error analysis may be defined as dealing with the differences between the way people learning a language speak, and the way adult native speakers of the language use the language. Such differences may create interest for a variety of reasons. We may begin with the interests of those who study language "for its own sake." Since language is not simply a more complex instance of something found elsewhere in the animal world, Chomsky suggests that the study of human language is the most fruitful way of discovering what constitutes human intelligence. Some of the most insightful notions about what language is have come from observing how language is acquired by children. By looking at children's speech, comparing it with adult speech, and trying to account for the differences, psycholinguists have been able to speculate about the nature of the mental processes that seem to be involved in language.

While the mother-child relationship and other language crucial activities of the child's experience do not include any consciously incorporated instructional strategies, in the field of second language teaching elaborate instructional procedures are often defended as being essential components in successful second language learning. Since the goal of the language course is to lead the learner towards adult uses of the new language, differences between the way the learner and the native speaker speak the language have been studied in the hope that methods of overcoming these difficulties might be devised. Errors in second language learning, it is sometimes said, could be avoided if we were to make a comparison of the learner's mother tongue and the target language. The sum of the differences would constitute his learning difficulties, and it is here that teaching strategies would be optimal. Alternatively, interpretation of errors in second language learning along the lines of errors in first language learning suggests that second language errors are not, by nature, different from those made by children learning English as a mother tongue, hence they should not be of undue concern to language teachers. The purpose of the present paper is to look at recent and less recent ideas on errors in second language learning, in the hope that such an examination might illuminate the experience of second language teachers.

1. "ERRORS" IN FIRST LANGUAGE LEARNING

What sort of ideas about language and language learning have been deduced from differences between children's and adult speech? Firstly, considerable support for current notions of language have been found in studies of child language development. It used to be thought that speaking was simply the exercise of our individual verbal habits, and that these were acquired through repetition, reinforcement, and conditioning, in much the same way as animals can be trained to perform certain tasks through the use of appropriate conditioning techniques. It is suggested that this is an inadequate account of language and of language learning. In children, it appears that the process of formulating language is an active and creative process, yet a process which follows similar patterns in children across quite differing learning circumstances. All children learning English as a mother tongue, seem to follow a similar sequence in their acquisition of grammar for instance. If we listen to the speech of English speaking children at about three or four years old for example, we hear them using question forms like this:[1]

What he can ride in?
Where I should put it?
Why he is doing it?

These questions share a common structural feature which makes them different from adult questions. In these questions, that part of the sentence which normally comes after the subject in the statement form - the *can* in *He can do it*, - has been left in this position in the question form, instead of being put before the subject as in the adult sentence *What can he do*? Now at about the same time as children are producing sentences like this, they *are* able to make questions which don't require a *wh* word such as *where* or *why*. They have no difficulty in saying *Can he ride in a truck*? but when they use a *wh* word they fail to change the word order and produce *What he can ride in*?

It is clear from instances like this in children's language that the children are not simply imitating the speech of their parents, for sentences like this do not appear in adult speech. If we were to compare the sentences which the child is capable of producing at this stage, with those of an adult, we would have an illustration of the child's *competence* at age 3 or 4 compared with adult competence.

Child's competence	Adult competence
He possesses the rules permitting questions with the form:	He possesses the rules permitting questions with the form:

Can he go?	*Can he go?*
Where he can go?	*Where can he go?*

He cannot produce:

Where can he go?

By looking at the differences between the child's sentences and those of the adult we see evidence of the way the child appears to be formulating hypothesis about the English language, some of which he will eventually abandon in favor of the rules of adult language. Since the differences between children and adult speech are *systematic*, found wherever children learn English, psycholinguists have been able to postulate universals that seem to be crucial for language development.[2]

Now the crucial elements in first language acquisition would seem to center on the psychology of learning, that is, those strategies employed by the child as he teaches himself his mother tongue, the development of his other faculties such as intelligence, cognition, perception and so on, and the structure and rules of the particular language he is acquiring, in this case, English. These would appear to shape and formulate the sentences he produces in a systematic way. It has been suggested that the differences between the way a second language is often spoken and the way the language is spoken by native speakers are systematic, just as children's language follows a definite norm and developmental sequence of its own, as we saw with the example of the use of questions. As evidence that second language learning is not entirely haphazard, Table 1 includes a sample of typical errors in the English verbal group made by people learning English as a second language.[3] These represent common errors made by people with quite different mother tongues. They cannot be dismissed as occasional, accidental, or as mere performance slips. Corder believes that such errors in second language speech reveal a systematic attempt to deal with the data, and that they should play the same role in our study of second language learning as differences between child and adult speech play in the study of first language acquisition. "It is in such an investigation that the study of learner's errors (in second language learning) would assume the role it already plays in the study of child language acquisition, since the key concept... is that the learner is using a definite system of language at every point in his development, although it is not the adult system in the one case, nor that of the second language in the other. The learner's errors are evidence of this system and are themselves systematic".[4]

TABLE 1

TYPICAL ERRORS IN ENGLISH AS A SECOND LANGUAGE: THE VERB GROUP [3]

(a) *be + verb stem* for *verb stem*
We are live in this hut. The sentence is occurs... We are hope... He is speaks French. We are walk to school every day.
(b) *be + verb stem + ed* for *verb stem + ed*
Farmers are went to their houses. One day it was happened. The teacher was told us.
(c) Wrong form after *do*
He did not found... He did not agreed... He did not asks me. He does not has...
(d) Wrong form after modal verb
Can be regard as... We can took him out. They can used it. She cannot to go. We must made... We can to see...
(e) *be* omitted before *verb + stem + ed* (participle)
He born in England. He disgusted.
(f) *be* omitted after *be + participle verb stem*
The sky is cover with clouds. He was punish.
(g) *be* omitted *before verb + ing*
They running very fast. The cows also crying. At 10.30 he going to kill the sheep.
(h) *verb stem* for *stem + s*
He always take a lot. He come from India.

2. THE SIGNIFICANCE OF ERRORS IN SECOND LANGUAGE LEARNING

If learner's errors in second language acquisition are systematic, in what ways are they organized, and what do they suggest about the nature of second language acquisition? Selinker calls the speech output in a second language an *Interlanguage* since it invariably differs from the target language, and he uses the term *fossilization* to refer to permanent characteristics of the speech of bilinguals irrespective of the age at which the second language is acquired or the amount of instruction or practice in it. He characterizes fossilization in the following way: "it is my contention that the most interesting phenomena in interlanguage performance are those items, rules and subsystems which are fossilizable . . . If it can be experimentally demonstrated that fossilizable items, rules and subsystems which occur in interlanguage performance are a result of the native language then we are dealing with the process of *language transfer*; if these fossilizable items, rules and subsystems are a result of identifiable items in training procedures, then we are dealing with *transfer-of training*; if they are a result of an identifiable approach by the learner to the material to be learned, then we are dealing with *strategies of learning*; if they are the result of an identifiable approach by the learner to communication with native speakers of the target language, then we are dealing with *strategies of communication*; and finally if they are the result of a clear overgeneralization of target language rules then we are dealing with the *reorganization of linguistic materials*. I would like to hypothesize that these five processes are central processes in second language learning and that each process forces fossilizable material upon surface Interlanguage utterances, controlling to a very large extent the shape of these utterances".[5]

I should like to focus on Selinker's description of Interlanguage characteristics as a basis for an account of typical errors in second language communication in English. As data I will begin with an analysis of samples of English speech elicited from two speakers, one whose mother tongue is European French, the other whose mother tongue is Czech. To obtain the six speech samples presented here the speakers were given a number of short texts in English; they were instructed to read the texts, and then asked to relate the content of each text in their own words without referring to the texts. In what ways does their performance of this task illustrate systematic approaches to second language communication?

SAMPLES OF SECOND LANGUAGE SPEECH

SAMPLE 1 (French)

The fact that land and minerals are very cheap in inaccessible *region*[1] and the development of new techniques *has allowed*

[1] Interference (plural not pronounced in French)

to capitalist man[2] to invest *the money*[3] in this region and exploit *the minerals*[4]. It's . . . this *is occurs*[5] in Australia where man has exploited huge *mounting*[6] of minerals in this region. And they *have the possibility to do great profits*[7] in this part of the country.

[2] Interference (a permis au capitaliste de . . .)

[3] Interference (l'argent)

[4] Interference (les minéraux)

[5] Overgeneralization

[6] Overgeneralization

[7] Interference (ont la possibilité de faire de grands profits)

SAMPLE 2 (Czech)

In the first part of the article the *author give*[1] us reasons for investment in inaccessible regions. The reason for . . . to invest in *this regions*[2] is the *possibility to buy*[3] land, minerals and deposits at very low cost. Another factor which *permits to invest*[4] in this region is the development of new technology which *permits to connected*[5] *this inaccessible regions*[6] in *short time*[7] with the regional . . . the regions which are civilized.

[1] Overgeneralization

[2] Overgeneralization

[3] Overgeneralization

[4] Overgeneralization

[5] Overgeneralization

[6] Overgeneralization

[7] Interference

SAMPLE 3 (French)

The human eye may be compared to a camera. The camera functions with a lens . . . *would*[1] *enregistrate*[1] by a lens and a screen behind it which *enregistrate*[3,4] the image. Once the image is developed *it stay*[5] here. *In contrary*[6] in movies the image *disappear*[7] from the screen. The eye-human eye functions like . . . the, like camera. It is *composed with*[8] a lens and behind the lens is *little*[9] screen coated with cells and *enregistrates*[10] the light.

[1] Performance error

[2] Interference (French borrowing)

[3] Interference (French borrowing)

[4] Overgeneralization (Omission of *s*)

[5] Overgeneralization

[6] Interference (au contraire)

[7] Overgeneralization

[8] Overgeneralization

[9] Performance error

[10] Interference (French borrowing)

SAMPLE 4 (Czech)

The author of the article compares the function of a camera and the function of the human eye. In an ordinary camera we have *lens*[1] which *concentrate*[2] beams of light on the film which is in the back of *camera*[3]. This light *can impress the film and in this way to fix*[4] the image of the film. The function of the human eye is very similar. We have the same lens in our eye and the film which is found in *camera*[5] is replaced in our eye by *retina*[6], an organic matter which is *composed by*[7] light sensitive cells.

[1] Interference
[2] Overgeneralization
[3] Interference
[4] Performance error
[5] Interference
[6] Interference
[7] Overgeneralization

SAMPLE 5 (French)

Steam engine[1] is *composed with*[2] a cylinder in which a piston can move easily and which *fix*[3] *well the cylinder*[4]. This piston is *actionated*[5] by the steam and it is connected to a wheel which it *makes turned*[6]. The steam . . . this engine *has been discovered*[7] in the 18th century, but James Watt is the person who *ameliorate*[8] it and who *give*[9] it *his actual form*[10].

[1] Performance error
[2] Overgeneralization
[3] Overgeneralization
[4] Interference (fixe bien le cylindre)
[5] Interference (actionné)
[6] Interference (le fait tourner)
[7] Interference (a été découvert)
[8] Interference (French borrowing)
[9] Performance error
[10] Interference (sa forme actuelle)

SAMPLE 6 (Czech)

The article is about the invention of *steam machine*[1]. *Steam machine*[2] was invented in *17th century*[3] by an Englishman, James Watt. The principle of the steam machine is . . . the basis of the steam machine

[1] Interference
[2] Interference
[3] Interference

is *piston*[4] which is pushed by the pressure of *steam*[5]. This piston is *connected with*[6] a wheel by a rod and in this way the motion of the wheel is possible.

[4] Interference

[5] Interference

[6] Overgeneralization

3. INTERFERENCE

Perhaps some of the most apparent examples of fossilizable items in second language communication are those described as instances of language transfer or interference. This may be defined as the use of elements from one language while speaking another, and may be found at the level of pronunciation, morphology, syntax, vocabulary and meaning. Examples 1, 2, 3, 4 and 7 in Sample 1 for example, reflect the use of elements of French morphology and syntax. In Example 1, the plural *s* is omitted, perhaps because plurals are not pronounced in French. A French structure is used in Example 2 — *has allowed to capitalist man* — following the French structure — *a permis au capitaliste de* — . In Example 3, French article usage is reflected in the use of — *the money* — following the French — *pour investir l'argent* — . In Example 7 the influence of French likewise seems evident; *have the possibility to do great profits* follows the French — *ont la possibilité de faire de grands profits*.

These examples of interference might appear to confirm some of the claims that have sometimes been made for the possibility of predicting instances of interference by contrasting the grammatical or other systems of two languages. "We can predict and describe the patterns that will cause difficulty in learning and those that will not cause difficulty, by comparing systematically the language and culture to be learned with the language and culture of the student".[6] Many such contrasts between languages have been attempted, though they have been criticized because they make demands on linguistic theory that our present knowledge about language is simply not ready to meet. We do not know enough about the higher level organization of particular languages to make the neat sort of contrasts that such statements imply, either feasible or meaningful. Most of the contrasts that have been made have been based on practical knowledge of two languages rather than on any systematic application of a theory of contrastive analysis.[7] Yet the instances of interference we have looked at seem so evident that it might appear that second language data can be entirely described in such terms. Indeed it often has been. What happens in fact is that in analysing second language data it is tempting to see all errors as effects of the interference of the mother tongue, ignoring all other relevant phenomena. Both Samples 1 and 2 provide examples of errors that require alternative interpretations.

4. OVERGENERALIZATION

In Samples 1 and 2 we find examples of a similar type of error, that illustrated by *this is occurs* (Example 5 in Sample 1) and *the author give us* (Example 1 in Sample 2). Here we have a similar type of error from both the French and Czech subjects. These illustrate what Selinker calls overgeneralization of target language rules, or the reorganization of linguistic materials. Jakobovits defines generalization as "the use of previously available strategies in new situations . . . In second language learning some of these strategies will prove helpful in organizing the facts about the second language, but others, perhaps due to superficial similarities will be misleading and inapplicable".[8] In Sample 1 the French speaker seems to have generalized the form *is occurs* from his experience of forms like *it is made of* and *it occurs*. In the Czech example in Sample 2 the omission of the third person *s* in *the author give us* may result from the pressure of other forms in English without *s*. Důscková remarks "Since (in English) all grammatical persons take the same zero verbal ending except for the third person singular in the present tense . . . omissions of the *s* in the third person singular in the present tense may be accounted for by the heavy pressure of all the other endingless forms. The endingless form is generalized for all persons".[9]

These examples of overgeneralization are the effects of particular learning strategies on items within the target language, and since such learning strategies appear to be universally employed when a learner is exposed to second language data, it is not surprising that many of the errors found in second language communication are identical despite the background language of the speaker. What differs are those effects of language transfer or interference while those that we find in common are the results of other learning strategies. One aspect of generalization has often been referred to in studies of first language acquisition. It has often been remarked that children learning English as their mother tongue will produce forms like *comed*, and *goed*, by analogy with past tense formation in regular verbs. Among children acquiring French as their mother tongue we likewise find things such as *on poudra* instead of *on pourra* (we will be able . . .) by probable analogy with *on voudra.*[10] Likewise both French speaking children and people learning French as a second language produce sentences like *je serai très malcontent* instead of *je serai très mécontent* presumably on the analogy:

heureuse/malheureuse *content/malcontent.*

Similar processes seem to account for common preposition mistakes in English. The learner, encountering a particular preposition with one type of verb, attempts by analogy to use the same preposition with similar verbs. *He showed me the book* leads to *He explained me the book. He said to me* gives *He asked to me. We talked about it* gives *We dis-*

cussed about it. Ask him to do it produces *Make him to do it. Go with him* leads to *Follow with him* and so on. The pressure of one English construction on another as the learner tests out his hypotheses about the structure of English may account for forms like *permits to invest* and *permits to connected* in Sample 2 and the other examples of overgeneralation by analogy noted in the other samples. (Sample 1, Example 6; Sample 2, Examples 3, 4 and 5; Sample 3, Example 8; Sample 4, Example 7; Sample 5, Example 2; Sample 6, Example 6).

In Sample 3 we have an interesting demonstration that the French speaker is not simply transferring the grammar of his mother tongue into English. In Example 8 he uses *composed with* instead of *composed of*. The Czech speaker in Sample 4, Example 7, likewise uses *composed by* and in Sample 5, Example 2, the French speaker again produces *composed with* instead of *composed of*. Had the French speaker followed the grammar of his mother tongue here he would have produced the correct English form. In French the equivalent would be *composé de* which is the English equivalent of *composed of*. The French equivalent of the form the French speaker used (*composé avec*) would in fact be inappropriate in French in this context. Both the French and the Czech speaker are evidently trying to work out the particular rules of English structure, being guided here not by the grammar of the mother tongue but by what they already know of English, and by their own intuitions. As Wolfe comments: "Once the student grasps the idea that the new language differs from his native language in many matters of structure, he will not know when it is safe to operate in terms of his native language (it seldom is) and he may try to create his own structures on the basis of previous contact with the new language . . . Some students, not knowing a correct form, will make up a form which does not parallel either the native or the target language. Or a student will persistently fail to make a grammatical distinction in the target language which he actually does make in his mother tongue".[11] We see examples of this from the French speaker, who fails to use the past tense in Sample 5, Example 9, although this would be required were he recounting the text in French. The psychological parameters in second language learning thus cannot be identified exclusively with the linguistic ones.

The effect of rules within the target language has been described in more formal terms by Falk in this way: "Few if any of the rules of the syntactic component are completely independent of the other rules. The formulation of one rule will invariably affect other rules in the grammar . . . Because this is so, the construction of a subgrammar, i.e. of some subset of the rules for a particular language, is a complicated task. Some of the rules in such a subgrammar will inevitably be ad hoc since the limited nature of the undertaking excludes detailed consideration of all the linguistic facts which may affect the rules".[12]

So far I have talked about interference and overgeneralization as if they were independent factors. The facts are not quite so consistent. In Samples 4 and 6 the Czech speaker consistently omits articles, and this I have attributed to interference, since articles are not present in his mother tongue. Dŭscková notes however "Although the difficulty in mastering the use of articles in English is ultimately due to the absence of this grammatical category in Czech, once the learner starts internalizing their system, interference from all the other terms of the (English) article system begins to operate as an additional factor".[13] This no doubt leads to diffidence and hesitancy in the use of articles by the Czech speaker. The interference of other aspects of the English article system on someone acquiring English as a second language is illustrated by F.G. French.[14] He notes that in English we say *The sparrow is a small bird — Sparrows are small birds*. Since the statements are exactly parallel a logical substitute for the second sentence would be *The sparrows are small birds*. In Burmese the equivalents would be:

sa gale thi	*nge thaw*	*nget*	*pyit thi*
the sparrow	small	bird	is

and in the plural

sa gale mya thi	*nge thaw*	*nget mya*	*pyit kya thi*
the sparrows	small	birds	are

Instead of following the form of the mother tongue however, the learner having first produced *The sparrows are* from *The sparrow is* sees a parallel between *sparrows* and *birds* and produces the common error, *The sparrows are the small birds*. A similar example is noted by Aguas, from Tagalog speaking students.[15] In her study she found a number of examples where sentences such as *Robot is like a human being* were produced instead of *A robot is like a human being*. Aguas rules out the possibility of transfer from Tagalog since this would have required a determiner before the noun.

Ang robot(ay) parang tao
(N-m)robot ___ like human being

Here she suggests the analogy is from a somewhat comparable English structure such as *Robots function like human beings*.

5. PERFORMANCE ERRORS

If language learning both in a first and second language setting involves trying out hypotheses about the language from one's experience of it (and in the case of second language learning — from one's experience of other languages), and abstracting the rules which permit us

to produce sentences in the language, then we will need to go further than looking at simple examples of interference, overgeneralization and analogy. These processes are in themselves insufficient to account for the complexity of language learning. The samples we have looked at do not enable us to say whether these mistakes are occasional, or represent permanent states in the speaker's competence. In Sample 3 for example, the speaker says (Example 9) *behind the lens is little screen*, omitting the article. But what does this error really represent? There are several possibilities. Firstly we may exclude interference from the mother tongue, since this would have required the use of the article in English. A second possibility is that the speaker realized the mistake as he said it but forgot to correct it — that he would have corrected it if he had had more time to think about it. In fact when looking at the transcribed text the speaker did correct this mistake himself.

Now this is something that the child who says *What he can ride in?* is unable to do. The child's competence is represented by that particular sentence, whereas this particular article error by the French speaker is simply the sort of error anyone is likely to make speaking under normal circumstances. It is therefore an error at the level of *performance* rather than competence. Performance errors are quite normal aspects of language use. When we are tired or hurried, we all make errors of this type. There is a similar error in Sample 4, Example 4. The Czech speaker was able to recognize the mistake in *This light can impress the film and in this way to fix the image of the film.* This error was probably a function of the length of the sentence the speaker was trying to produce, hence it is related to memory limitations rather than to competence. Clearly if we want to have a more certain idea of someone's competence in a second language, we need to take a much closer and more detailed look at their speech output to find out if their sentences consistently display particular interlanguage characteristics, that is, to find out if the speaker has internalized a system of some sort that does not correspond to that of the native speaker.

6. MARKERS OF TRANSITIONAL COMPETENCE

Just as we need to be able to distinguish between performance and competence errors in the analysis of second language data, so it may be ncesssary to distinguish between those errors which indicate the learning sequence by which particular grammatical rules are built up, and those which represent the final state of the speaker's competence. In our example of first language learning for example, sentences like *What he can ride in?* seem to be produced by all English speaking children before they are able to use the form of the adult grammar — *What can he ride in?* Are some of the errors observed in second language learning also representative of developmental sequences by means of which the learner masters the rules of the English grammatical system? This question cannot be

answered from the data I have presented here, and I know of no studies which could confirm or reject such a hypothesis. What is needed are detailed longitudinal studies of an adult learner's progress with a second language, documenting the appearance and development of particular structures. The types of short term errors attributed here to over-generalization and analogy could then be placed within the overall sequence of language development. It may be that the innate ability to generate and hypothesize rules, so evident in first language acquisition, becomes subordinate in adult second language learning to secondary learning strategies, such as generalization, borrowing, and memorization, for purely biological reasons. It should also be noted that I am using terms like interference, analogy, and generalization, without relating them to a psycholinguistic model of language. They are used here simply as convenient ways of classifying observable phenomena at the level of speech, though this does not explain how they are represented at the level of language. Psycholinguistic models have been proposed which do try to account for such factors as interference and generalization, such as that of Jakobovits.[16]

If we were to try to locate our Czech speaker's article errors at the level of competence, we would require a close developmental study of his article usage as he acquires English, to find out if after some exposure to English, his use of articles was entirely haphazard, or whether he had worked out some consistent way of dealing with them. Is his learning task the same as that of the child faced with the appearance of articles in his mother tongue?

Jones, in his study of child language development, places the development of the article system as coming logically and necessarily after the development of the substantive or noun.[17] It is a further conceptualization of the substantive, permitting a point of view which conceptualizes it either as a universal or a particular. Leopold found that articles were not used at all by his child subjects in the first two years but later took on systematic usage.[18] With an adult acquiring the system as a second language however, cognitive development has already occurred, hence he may have to resort to other strategies to develop rules to deal with the article system in English.

7. OTHER FORMS OF INTERFERENCE

Before looking at other aspects of second language learning strategies, I should like to refer to an aspect of interference which is not manifest in the particular samples we have looked at so far, but which is nevertheless quite widespread. This has to do with contrasts between styles across languages. We may regard style as the choice we have within a language of a particular mode of expression, such as formal or informal, and colloquial or officious. In some speech communities

differences of this sort are so marked and have become so institutionalized that they may be regarded as quite distinct varieties of the same language. In Bhagdad, according to Ferguson, the Christian Arabs speak a "Christian Arabic" dialect when talking among themselves but speak the general Bhagdad dialect "Muslim Arabic" when talking in a mixed group.[19] This phenomenon, where two distinct varieties of a language exist side by side in a community, with each having a definite and distinct role to play, is what Ferguson called Diglossia. What typically happens is that particular functions are assigned to each variety of the language, the most fundamental distinction being between what may be called High and Low uses of the language. The High form is generally regarded as superior to the Low form and is compulsory for certain types of situations. Ferguson gives the following sample situations, with indications of the appropriate form of the language to be used:

sermon in church or mosque	H
instructions to servants, waiters, clerks, workmen	L
personal letter	H
speech in Parliament	H
university lecture	H
conversation with family, friends, colleagues	L
news broadcast	H
radio soap opera	L
newspaper editorial, news story, caption on picture	H
caption on political cartoon	L
poetry	H
folk literature	L

Now the differences between the High and Low forms in language which exhibit this phenomenon, and it is very widespread — Arabic, Modern Greek, Swiss German, and many Asian languages for example — are much greater than those between what we may call a formal or informal style in English. In diglossic communities the High style may have striking differences in grammar and in word order, and in the area of the vocabulary the High style may have a much more learned and classical lexicon than the Low.

People who belong to language communities which manifest this phenomenon may come to expect such switching between distinct language varieties to be a universal feature of languages. In other words, when they come to write something in English which would demand a high style in their mother tongue, they may feel a pressure to give their English a correspondingly high style. Thus one finds people who write English clearly and faultlessly, exhibiting what I call diglossamania in certain situations. In English for example, we do not feel that there is a low status about words of high frequency, in the vocabulary we use in normal

everyday situations. A Tamil speaking student however may prefer the feel of *I instructed him to obtain it for me* over *I told him to get it for me*. There may be a distinct preference for archaic words or for words of low frequency, whereas the native speaker of English prefers a simple style. You may have noticed this in written English from Greek or Arabic students for example, depending on the topic they choose to write about.

The effects of the High/Low distinction in the student's mother tongue may also be evident at the grammatical level in his written English. Kaplan, in an article dealing with composition difficulties of Arab students, remarks that Arab students appear to prefer certain devices of conjoining sentences over others[20], thus the sentences:

The boy was here.
He drank the milk.

may be more frequently conjoined with *and* by Arab students, producing *The boy was here and he drank the milk* in preference to *The boy who was here drank the milk*. This may be attributed to the influence of the grammar of a high style in Arabic. This use of balancing devices to create a more aesthetic style produces among certain Indian students sentences like:

While I am still a student, and yet I still have plenty of time
Whenever I see him, then I feel happy
Even though I am poor, yet I am happy

Here are two examples from a letter-writing manual for students of English written by an Asian with a diglossic mother tongue. As a model for a personal letter he uses a distinctly high style:

With the warm and fragrant breath of Spring, here approaches the bliss of Eastertide. May it shower joy and happiness upon you all. The tide brings to my mind the old memories of several Easters feted with you and the decorated eggs placed on my dresser.

For an order however, the writer presents a normal low style as a model:

I want to order from you a copy of the latest edition of _____ book. In this connection please let me know what will be the total cost.

The prevalence of artificially high-style uses of English among Indians has been called "Babu English" and it is well parodied in a novel by F. Anstey.[21]

After forming my resolution of writing a large novel, I confided it to my crony, Mr. Ram Ashootosh Lall, who warmly recommended to persevere in such a magnus opus. So I became divinely inflated periodically every evening from 8 to 12 p.m., disregarding all entreaties from feminine relatives to stop and indulge in a blow-out on ordinary eatables . . . and at length my colossal effusion was completed, and I had written myself out: after which I had the indescribable joy and felicity to read my composition to my mothers in law and wives and their respective progenies and offsprings, whereupon, although they were not acquainted with a word of English, they were overcome by such severe admiration for my fecundity and native eloquence that they swooned with rapture . . . "

In examining instances of interference or language transfer we thus need to consider more than just the linguistic variables and their distribution across languages; we need also consider social reactions to different aspects of language use, since these too may be carried from one language to another influencing the sort of sentences that may be formulated in the second language.

8. STRATEGIES OF COMMUNICATION AND ASSIMILATION

The shape of the utterances produced in the second language may be influenced by additional factors, not related to interference, or to aspects of generalization and analogy. Under communication strategies we may include errors which derive from the fact that heavy communication demands may be made on the second language, forcing the learner to mold whatever he has assimilated of the second language into a means of saying what he wants to say, or of getting done what he wants to get done. The learner may simplify the syntax of the language in an effort to make the language into an instrument of his own intentions. Errors deriving from such efforts may be attributed to strategies of communication. Errors attributable to the learner's attempts to reduce the learning burden of what he has to assimilate may be closely related, and these may be referred to as strategies of assimilation.

Perhaps the clearest examples of alterations in language structure as a result of strategies of assimilation and communication are to be found in pidgin languages — languages used by people whose mother tongues are different, in order to facilitate communication between them. In the process of becoming a pidgin a language often loses some of its vocabulary, or is simplified in its phonology or grammar. Simpli-

fication is one way in which speakers of different languages can make a new language easier to learn and use.[22]

We frequently find instances of a similar process in a normal second language setting. The communicative demands made on the second language may far outpace the speaker's actual competence in the second language, thus the speaker may have to create the means of expressing relations for which the language course has not prepared him. The school English course, for example, may begin with the present tense, the present continuous, and following concepts of linguistic grading or sequencing, delay the introduction of other tenses until the present and present continuous have been mastered. Supposing however, that the English program is that of an English-medium school in a multi-lingual context, where English provides the only lingua franca between Chinese, Malay and Tamil-speaking children. The children in their use of English as a lingua franca outside of the classroom cannot wait until the past and "future" tenses have been taught before they will begin talking about past and planned events. They will have to establish their own way of dealing with past and planned events, and in so doing there will be considerable simplification of syntax, and extension of the uses of known forms into other areas. This may produce what has been called "dormitory English" and "playground English" which can function as an entirely efficient form of communication: *You are not knowing what Boonlat is do. He is open stand-pipe . . . water is not coming, so he go ask . . .* [23]

This may seem an extreme example, but in any situation where the second language actually has to be used outside the classroom in real situations, inevitably the learner finds himself having to cope with circumstances which the school syllabus has not covered or for which he may not have the linguistic resources available. Looking at such language samples, it is often not possible to say whether a particular error is attributable to a strategy of communication, or to a strategy of assimilation, that is, an identifiable approach by the learner to the material being learned.

My own acquisition of French in Quebec has provided me with many examples of the effects of communication and assimilation strategies, since on arrival in Quebec extensive demands were immediately made on whatever I had been able to pick up of the language. As an example of assimilation strategy, I found the form *je vais* (I'm going to) easier to learn than the future tense in French, and I quickly developed the means of expressing futurity or intention with the use of this construction. This however led me to use the *going to* form in situations where the future tense was appropriate, and now I frequently have to correct a tendency to use the *going to* form in sentences like *Je vais vous téléphoner ce soir* (I'm going to telephone you tonight) when what is really intended is *Je vous téléphonerai ce soir* (I'll telephone you tonight).

As an example of a communication strategy my acquisition of the conditionnel passé tense in French is illuminating. A language need which soon presented itself was the need to express intentions in the past which I was unable to fulfill. Since I did not acquire the grammatical means to do this until fairly late, I had to find alternative ways of expressing the same content. This I did by lexical means, through the use of a longer construction. Thus instead of saying "I would have liked to have seen the film last night" — *J'aurais voulu voir le film hier soir* — I would say "I had the intention of seeing the film last night, but ..." — *J'avais l'intention de voir le film hier soir, mais . . .*

Similar strategies may account for the frequent misuse of the present tense as a narrative form, since the present tense is usually introduced first in language courses and the additional learning burden involved in acquiring the past tense can be avoided if the past is simply expressed lexically. A word like *yesterday* will thus suffice to locate the time setting and the speaker will continue in the present. *Yesterday we go for a drive and we stop near the beach and we . . .* Thus the speaker is able to expand the functional capacities of his knowledge of the second language, while keeping to known or sure ground.

A similar explanation may be attributed to the development of the past continuous form as a narrative instead of the simple past. George notes that many course books introduce the present and the present continuous in contexts such as these:[24]

The book is on the desk (present state)
I am putting the book on the desk (present action)

Then the past form of the first sentence may be extensively practised.

The book was on the desk (past state)

By the time the course comes to teach past narrative — *We walked outside, we looked towards the sky . . .* the students have already developed their own means of expressing this function, by using the *was* form as a past marker and by using the continuous form for verbs of action. *In the afternoon we were going back. On Saturday we were going down town and we were seeing a film and after we were meeting my brother . . .*

The selection and gradation of items in a language course should therefore take account not merely of linguistic factors, such as the frequency or complexity of items to be introduced, but also the demands that will be made on the language and how the learner will adapt what he is given to his particular needs.

9. ERRORS AND THE TEACHER

Teachers, as Pit Corder remarks, are more concerned with how to deal with errors than with what causes them, and in this there have been several schools of thought. "One is that if we were to achieve a perfect teaching method the errors would never be committed in the first place, and that therefore the occurrence of errors is merely a sign of the present inadequacy of our teaching techniques."[25] This attitude is illustrated in the introduction to a recent elementary English course. "One of the teacher's aims should be to prevent mistakes from occurring. In the early stages while the pupils are wholly dependent on the teacher for what they learn, it should be possible to achieve this aim."[26]

It is difficult to reconcile this approach with what we know or can observe about language learning. Children do not themselves acquire language by correctly imitating sentences they hear. "A child learns his language by interacting with it, by actively coping with and manipulating his environment. He does this on the basis of unsystematic, usually unplanned language input on the part of his parents."[27] Does this lead to an essential casualness on the part of the teacher towards the nature of the sentences his students produce? After all, current views of language learning emphasize that language cannot be taught, but must be learned by the child. Attempts to teach language by direct imposition of an adult grammatical model seem psycholinguistically inconsistent.

In assessing the teacher's role in second language teaching we are however faced with the fact that although the child learning his mother tongue begins by producing sentences which do not duplicate adult sentences, gradually building towards an adult grammar, in second language learning what is usually the end point in the learning process is an Interlanguage, that is, a form differing from the target language characterized by interference both internal and external to the language. What we would have to postulate then is the encouragement of those types of sentences that indicate language development, and the minimization of opportunities for fossilization, for the establishment of permanent deficiencies in the learner's competence. In the present state of our knowledge about second language acquisition this is not a realizable goal, since we have so little information about which types of errors in second language learning are positive and which are negative. A form like *What he is doing?* may represent transitional competence in first language acquisition, but fossilization in the second language learner's speech. In the present state of our knowledge, we need to be careful not to be overoptimistic about the relevance to second language teaching of studies of first language acquisition.

At the same time all language teaching techniques can be seen to produce transfer-of-training effects, where the general effects of memory on the material taught are apparent in reconstruction, and retroactive inhibition as well as generalization and analogy. It is possible to try

to arrange teaching materials to minimize the unwanted effects of such factors, but we have no way of knowing whether this is ultimately of any advantage to the learner. Questions, for example, invariably influence in unintended ways the form of the sentence the student uses in his answer. *What was the woman saying?* used to elicit statements about a film will tend to elicit *The woman saying she will . . . Ask her how long it takes* will produce *How long it takes?* and so on. Or if we introduce a text for practising comparative constructions including *is as big as, is bigger than,* some of the students will produce *is as bigger as, is as big than.* Such effects might be minimized by separating the forms which interfere with each other and teaching them at different times, but we cannot say very much about what the results of particular instructional approaches will be on the final competence of the learner. It may make no difference at all, since there is no evidence that the linguistic and instructional variables — the points we select to teach and the order and manner in which we teach them — are the same as the psychological variables, the actual nature of the process by which the language items become part of the speaker's competence.

Despite the inadequacies of our present knowledge about the relevance of particular approaches to language instruction, there are excellent social motivations for teachers' drawing their learners' attention to examples of fossilization, to those errors which seem to have become a permanent rather than a transitional feature of their speech. In looking at the social justification for the correction of certain errors we can keep in mind however that linguistically, we may simply be trying to modify our learner's performance rules. Even if his competence is represented in sentences like *Yesterday I go down town*, conscious attention to the way he speaks may enable him to modify his performance so that he produces *Yesterday I went down town.* If grammatically deviant speech still serves to communicate the speaker's intentions, why should we pay further attention to it?

Simply because speech is linked to attitudes and social structure. Deviancy from grammatical or phonological norms of a speech community elicits evaluational reactions which may classify a person unfavorably. In sociolinguistic terms " . . . our speech, by offering a rich variety of social and ethnic correlates, each of which has attitudinal correlates in our own and our listener's behaviour is one means by which we remind ourselves and others of social and ethnic boundaries, and is thus a part of the process of social maintenance (or change)".[28] Psychologists have thus investigated the way listeners will provide a range of reliable cultural, social class, and personality associations upon hearing speech samples. These are usually measured by playing recordings of speakers, and having them rated on a series of characteristics, such as intelligence, character, good looks and so on. I propose that the adult second language learner's deviation from grammatical norms elicits evaluational reactions

which can be measured in similar ways. My evidence is largely anecdotal. Here is an extract from a recent UNESCO report. "Individuals who learn new languages later in life, especially after the age of 15 or so, characteristically have more difficulty with new structures than with new vocabulary, and the difficulty seems to increase with age. It is not uncommon to characterize such people as "having a foreign accent" or "speaking brokenly", even though their vocabulary and general fluency may be quite satisfactory in the acquired language. Although they have little difficulty in being understood for practical purposes, they are apt to be considered as perpetual foreigners or outsiders".[29]

My observations of native speakers' reactions to grammatical deviancy suggest that not all instances of deviancy, not all errors, are evaluated in the same way. We don't react to *I'm going in Paris next week* in the same way as we react to *I is going to Paris next week* or to *He come from India*. Omission of a third person *s* or a plural seems to grate rather violently, whereas a misplaced preposition may not affect us so much. Deviancy in article usage may elicit a "baby talk" evaluation. You may have noticed this in your own relations with non-native speakers of English. One almost automatically corrects certain types of mistakes while we let others pass without too much thought.

Native speakers' reactions to systematic variation in grammatical or other features could be measured using the psychologists' techniques for measuring reactions to different dialects. This would demand systematically varying the nature of deviancy in oral or written texts and having native speakers assess the personality traits of the speakers.

Here is an example of a passage in which article usage is deviant:

> *I remember war period very clearly. I remember big bomb which exploded near house I was living in in 1940. First wall began to crack and window broke and I hurried out of house just before chimney fell down. I saw that big tree in front of house was broken.*

Here is the same text with article usage restored but past tense omitted:

> *I remember the war period very clearly. I remember a big bomb which explode near the house I live in in 1940. First the wall begin to crack and the window break and I hurry out of the house just before the chimney fall down. I see that a big tree in front of the house is broken.*

Information on the reaction of native speakers to particular aspects of grammatical deviancy would thus enable us to say which examples of fossilization the second language teacher should pay most attention to.

CONCLUSIONS

To draw together some of the points I have touched upon here, I have first of all tried to suggest why people who speak second languages may not speak or write them with native-speaker like fluency. I have suggested that deficiencies in their knowledge may be the results of interference, the use of aspects of another language at a variety of levels; of strategies of learning such as overgeneralization and analogy by means of which the learner tests out his hypotheses about the structure of the language; of strategies of assimilation, in which the learner makes his learning task easier; and of strategies of communication, whereby the learner adapts what he knows into an efficient communication model, producing an optimal utility grammar from what he knows of the language.

At the same time we need to distinguish between performance and competence errors. The former are occasional and haphazard and are related to such factors as fatigue, memory limitations and so on. The latter are systematic and may represent either a transitional stage in the development of a grammatical rule or the final stage of the speaker's knowledge. While our knowledge about second language learning is still largely speculative, excluding the possibility of prescribing recipes for teachers, I hope that this account of errors and learning strategies has at least suggested some of the reasons for what we hear from our students of second languages.

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